

REMARKS

Claims 1 and 4-21 are pending in this application. By this Amendment, claims 1, 4 and 9 are amended, and claim 21 is added. The claim amendments and added claim introduce no new matter because they are supported by at least the claims, and Applicants' disclosure at pages 26, 27 32 and 33, as originally filed. Claims 5-10 and 16 are provisionally withdrawn from consideration as drawn to a non-elected species. Claims 2 and 3 are canceled without prejudice to, or disclaimer of, the subject matter recited in those claims. Reconsideration of the application based on the above amendments and the following remarks is respectfully requested.

With regard to claims 5-10 and 16, Applicants respectfully request that, upon finding claim 1 allowable, these claims be rejoined and allowed as well as they all depend from claim 1, thereby inheriting all of the allowable features of that claim.

The Office Action, in paragraph 4, rejects claims 11-15 and 17-19 under 35 U.S.C. §112, second paragraph, as being indefinite. Claim 1 is amended, among other reasons, to obviate this rejection.

Accordingly, reconsideration and withdrawal of the rejection of claims 11-15 and 17-19 under 35 U.S.C. §112, second paragraph, are respectfully requested.

The Office Action, in paragraph 7, rejects claims 1-4, 11-15 and 17-20 under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,453,964 to Downs et al. (hereinafter "Downs"). This rejection is respectfully traversed.

Downs teaches monitoring a crankshaft position to estimate the crank shaft stop position, and correcting the crank shaft position by the motor generator if the estimated crank shaft stop position is out of a target position range. There is nothing in Downs, however, to suggest that the invention disclosed therein controls the inertia energy of the engine to be

constant by the motor and then removes the motoring force to allow the engine to stop at the predetermined position by the controlled inertia energy.

Claim 1 recites, among other features, an inertia energy control unit that controls inertia energy of the engine, by using a motor for driving the engine, to be in a predetermined state in association with the fuel cut, at a timing in a process of stopping the engine; and a stop control unit which stops the engine at a predetermined crank angle position by utilizing the inertia energy, wherein the inertia energy control unit controls a number of revolutions of the engine to be within a range of a predetermined number of engine revolutions by performing a motoring of the engine for a predetermined time period using the motor, and wherein the stop control unit stops the engine by terminating the motoring after the predetermined time period has passed. In this manner, the subject matter of the pending claims results in the engine being stopped at the predetermined crank angle by appropriately controlling the inertia energy. This process is described in, for example, Applicants' disclosure at page 26, line 27 - page 29, line 26. In the process of stopping the engine, the motoring by using the motor is performed for predetermined time periods to keep the inertia energy of the engine at a predetermined amount. Then, the motoring is terminated to remove the driving force exerted by the motor, thereby allowing the engine to reach the predetermined appropriate position and stop by the inertia energy. As indicated above, there is nothing in Downs that can reasonably be considered to teach, or to have suggested, such a feature.

For at least the above reasons, Downs cannot reasonably be considered to teach, or to have suggested, the combination of all of the features positively recited in independent claim 1. Further, claims 4, 11-15 and 17-20 are also neither taught, nor would they have been suggested, by Downs for at least the respective dependence of these claims directly or

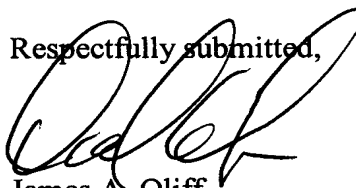
indirectly on an allowable base claim, as well as for the separately patentable subject matter that each of these claims recites.

Accordingly, reconsideration and withdrawal of the rejection of claims 1, 4, 11-15 and 17-20 under 35 U.S.C. §102(e) as being anticipated by Downs are respectfully requested.

Claim 21 recites a feature the predetermined time period of the motor is a time for keeping the inertia energy of the engine constant. This feature is discussed in Applicants' disclosure at least at page 32, line 28 - page 33, line 2. Claim 21 is allowable for at least its dependence on an allowable base claim, as well as for the separately patentable subject matter that this claim recites.

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1 and 4-21 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact Applicants' undersigned representative at the telephone number set forth below.

Respectfully submitted,

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